

UK Patent Application (19) GB (11) 2 328 467 (13) A

(43) Date of Printing by UK Office 24.02.1999

(21) Application No 9820642.8

(22) Date of Filing 21.03.1997

(30) Priority Data

(31) 08621411

(32) 25.03.1996

(33) US

(86) International Application Data

PCT/US97/04543 En 21.03.1997

(87) International Publication Data

WO97/36084 En 02.10.1997

(51) INT CL⁶

E21B 7/00 44/00 // E21B 47/00

(52) UK CL (Edition Q)

E1F FGH

G1N NAAJA N3S7 N7H2 N7L2

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(58) Field of Search by ISA

U.S : 175/39,40; 73/152.43, 152.44, 152.45, 152.47,
152.48

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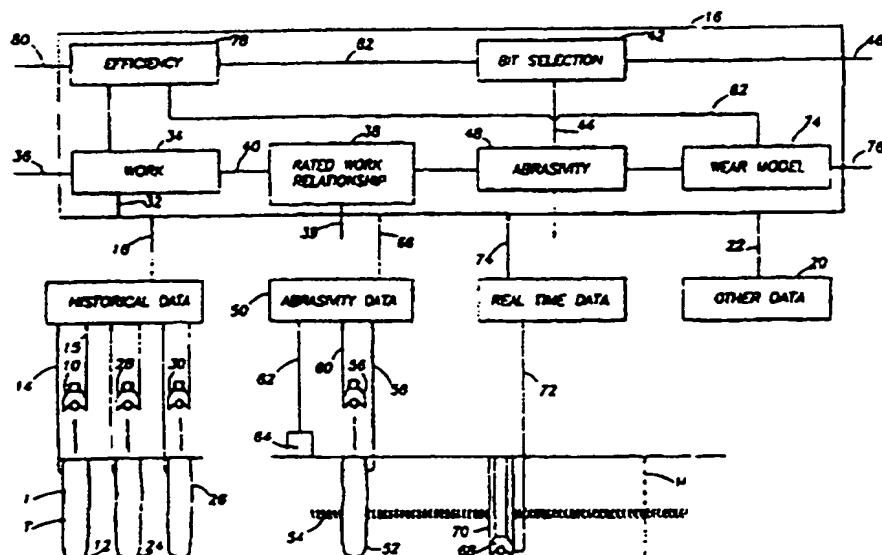
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(54) Abstract Title

Method of assaying downhole occurrences and conditions

(57) A method of assaying work of a bit (10) of a given size and design comprises the steps of drilling a hole with the bit (10) from an initial point (I) to a terminal point (T) and recording the distance between the initial and terminal points. Electrical incremental actual force signals (18) are generated, each corresponding to a force of the bit (10) over a respective increment of the distance between the initial and terminal points. Electrical incremental distance signals (14) are also generated, each corresponding to the length of the increment for a respective one of the incremental actual force signals (18). The incremental actual force signals and incremental distance signals are processed to produce a value corresponding to the total work done by the bit in drilling from the initial point to the terminal point. Using such a work assay, a number of other downhole occurrences and/or conditions can be assayed.



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